

#### **ARVENSION TECHNOLOGIES**

Arvension Technologies LLP is a startup company in software field based on Thiruvananthapuram, Kerala offering a wide range of software outsourcing services, Game development services as well as training classes based on various programming skills.

The Arvension Technologies LLP team, recognize the importance of software development in this highly technologically advanced world and offer software services that provide the cutting edge solutions utilizing the latest technologies.

Our company has a qualified and experienced team of software and management professionals with varied domain knowledge and expertise that will add value and provide a competitive distinct advantage in custom software development services. Arvension Technologies LLP offers software services in a professional and cost effective manner

# **ABSTRACT**

The Human Resource Management System (HRMS) is a piece of technology meant to increase
decision security, performance effectiveness, and institutional growth. Using a human resource
management system, the HR managers will be able to oversee the hiring, training, work
schedules, attendance and leave systems, employee information, performance evaluations,
payroll, canteen, travel, grievance, and retention of employees. By enhancing the quality of the
workforce, making it simpler to comply with rules, and boosting efficiency, the system will
enhance productivity.

#### 1. INTRODUCTION

To maintain the data of all human resource requires a significant amount of time if we do it without software. Companies today strive to improve management and have better control over their workforce. They require software called a human resource management system to more effectively fulfill these requirements.

HR Management System is software which satisfies the needs of the Human Resources Department of a company to manage employees personal data (citizen identity number, name, surname, birth date, birthplace, educational information, family details etc.), annual leaves, payroll, trainings, skills, performance evaluation, recruitment of new employees and so on. Our HR Management System will meet the needs for managing the personal data, system authentication and authorization of an employee.

To more effectively and neatly govern and manage personnel data, our HRMS project is now under development. Our solution will provide them with improved software to manage their personal data as well as a control system to authorize and authenticate admission for staff.

This system's key objectives are to provide thorough, up-to-date, and accurate information for personal administration and analysis, to match its capabilities with the requirements, competencies, and interests of human resource staff and other users, and to increase comfort and trust among its target audience.

#### 1.1 EXISTING SYSTEM

The present system uses a very basic excel sheets and paper system. The candidate grouping, communication between candidates, employees and higher authorities, integration between different branches and departments, attendance and leave management, the decision for appraisal for assigning next task, etc are not properly projected. Managing hundreds of employees, vendors, and finances manually is not an option for huge enterprises. It requires extra effort and time. Also data maintenance is a very hectic task, as it is maintained manually it will not be accurate and clear. The HR also has to deal with the problem of data

security. The data is not at all secure when using the current system, and there is occasionally a danger of losing files. Moreover, the hiring process requires a lot of time and effort. With the use of the current system, the company's employees are unaware of both their own information and that of other employees. Both HR personnel and other employees who must use the programme must find it to be user-friendly.

#### 1.2 PROPOSED SYSTEM

To overcome the issues that existed with the currently in use manual method, the "Human resource management system" was created. This software is intended to get rid of, and sometimes even lessen, the difficulties that the current system has. Additionally, this system is created to meet a specific demand of the business, enabling it to run operations efficiently and effectively. HRMS is the most important because it provides systematic and accurate information about the employees of the organization.

In the corporate and industrial world, which is expanding quickly, HRMS is unavoidable. The organization's management of its workforce, as well as the protection of its sensitive data, requires the highest care. Finding the ideal balance and harmony between the processes, the resources, their performance, and their secret data has become urgently necessary in the modern world. In order to operate their organization effectively, corporations look for a complete, all-inclusive solution.

#### HRMS software helps to:

- Automates and streamlines business processes and enhances productivity and accuracy.
- Accessibility- HRMS makes it easier for the employees, department head, HR and admin to access their information and make working more efficient and effective.
- It saves a considerable amount of time for all as the scope for manual paper-work is eliminated.
- It makes not only recruitment easier but also helps in on boarding on new employees.

- Single dashboard gives bird's eye perspective to the user assessing and monitoring their attendance, work, assignments, other schedules, etc.
- User can create important reports on all formats, and also provides statistics for managerial decisions, all very quickly.
- It increases employee participation in group activities, such as meetings, conferences, etc. as events are can be seen on the dashboard with notifications.
- HRMS also helps in managing finances of the organization.
- Data security and integrity is ensured.
- HRMS also comes with cost benefits as it becomes a one-time investment with smaller affordable monthly costs for managed services.

#### So HRMS objective are as following:-

- ➤ Manage the recruitment of a workforce.
- > Track development related to employees.
- ➤ It provides reports on period-to-period details of employees.
- ➤ Give training program and information to all new employees.
- ➤ Improving manpower plan and the effective utilization of manpower across the organization.
- ➤ 24 HRS attendance/leave management
- > Payroll management
- ➤ Online leave management system
- > Employee information portal
- > Timesheet
- > Travel management
- > Task management
- > HR analytics
- > Canteen management
- Visitor management
- > Grievance management

# 2. FUNCTIONAL REQUIREMENT

# 2.1 Super Admin Specific Requirements

- Login
- Dashboard
  - Task sheet
  - New joins
  - Attendance chart for the week
  - Upcoming holidays
  - Work anniversary
  - Employee on leave and present
  - Upcoming birthdays
- Admin management
  - Add admin
  - Remove admin
- HR management
  - View HR list
  - Add HR
  - Remove HR
  - View leave
- Recruitment management
  - Select the team
  - Edit the team
  - Remove the team
- Employee management
  - View employee data
    - o Attendance
    - o Leave
    - Personal data
    - Salary details

- Performance
- o Training details
- View task allotted
- Edit/update employee data
- Delete/block employee data
- Payroll management
  - View earnings and deductions
  - View and update pay groups or category
- Travel management
  - Travel approval
  - View travel details
- Visitor management
  - View visitor data
- Grievance Management
  - View grievance
  - Status of grievance
- Add company policies

## 2.2 Admin Specific Requirements

- Login
- Dashboard
  - Task sheet
  - New joins
  - Attendance
  - Upcoming holidays
  - Work anniversary
  - Employee on leave
  - Upcoming birthdays
  - Announcements
  - Profile

- check in/check out
- HR management
  - View HR list
  - Add HR
  - Remove HR
- Approvals
  - Vacancy in departments
  - New employees
  - Travel approval
  - Accept payroll
- Manage extra leaves
- Department management

## 2.3 HR Specific Requirements

- Dashboard
  - Task sheet
  - Timing for this month
  - New joins
  - Company policies
  - HR attendance
  - Leave used, remain
  - Upcoming holidays
  - Work anniversary
  - Employee on leave
  - Upcoming birthdays
  - Announcements
  - HR profile
  - check in/check out
- Employee management
  - View all data

- Employee details with add, view, update, delete options
- Each employee profile
- Add employee
- Department management
- Account management
- Performance evaluation
- Give mark based on performance
- Resigned employee details, blocked employee list with reason
- Generate experience certificate for resigned employee
- Details of hourly and monthly working employees
- Recruitment management
  - Vacancy view(uploaded by the department head)
  - Vacancy approve
  - Vacancy list to recruitment board
  - View shortlisted candidates
  - View salary fitment comparison
  - Attendance management
    - Employee check in and checkout time
    - Present and absent employees
    - Total strength and leave
    - Graphical chart and absentees on duty
    - Auto email to respective heads in the beginning of every shift of absentees and late without any manual intervention
    - Monthly consolidated data at all time office component for payroll integration
    - Integration to online leave management system
  - Leave management
    - Accept leave request
    - Leave cancellation/rejection before and after approval
    - Leave rule definition
    - Email alert for approval, cancellation and rejection

- Leave balance
- Integration to attendance system
- View attendance events like in time, out time
- Leave permission
- Payroll management
  - Calculate the total working time, bonus, increments ,paid and unpaid leaves and forward to Accountant.
- Learning and development
  - Courses are mapped across department and designation
  - Upload video links
  - Performance evaluation
  - Dynamic set of question patterns can be set against each course
- Time sheet
  - Prepare time sheet
  - Provide time sheet for respective employees
- Travel management
  - Accept employees travel request
  - Expense definition
  - Advance approval
  - Admin ticket booking
  - Exchange rate is captured for each currency.
  - Expense claim based on grades
- Task management
  - View the task of different employees
  - Provide time sheet for respective employees
  - Provide notification about task and dead line
- HR analytics
  - Employee movement
  - Separation
  - New joiners

- Experience status
- Group analysis
- Pay summary based on attribute
- Cost count matrix
- Promotions
- Dynamic data wizard
- Gender analysis
- Month wise/Quarterly/Half yearly/Annual attrition
- Increments
- Pay component comparison
- Various chart based on master and earning components
- Performance management
  - KRA definition
  - KRA rating
  - HR normalization
  - Appraisal result output
  - Report on increments and promotions
- Training and development
  - Training calendar
  - Training budget
  - Training request by employees
  - Training approval
  - Training registration
  - Training attendance
  - Training feedback
  - Training cost
  - Training history
  - Training hours shortfall
- Visitor management system
  - Visitor data capture and photo once

- Retrieval of data again by either mobile number or name without need to enter visitor data again
- Visitor pass printing with photo
- Closure of visitor pass after visitor exit the organization
- Number of active visitors in the organization at any point of time
- Repeated visitor for the same staff on a periodical basis
- Email to staff about the visitor
- Grievance management
  - List of Grievance master
  - Solve complaints If department head cannot solve after a particular time

## 2.4 Employee Specific Requirements

- Login
- Dashboard
  - Task sheet
  - Timing for this month
  - New joins
  - Company policies
  - Attendance
  - Leave balance, used, remain
  - Upcoming holidays
  - Work anniversary
  - Upcoming birthdays
  - Announcements
  - Profile
  - Employee timing and check in
  - Late arrival count
  - Thought of the day
  - Job openings to refer
  - Notifications
- Profile

- View and edit option
- Training and development
  - Training Calendar
  - Training request
  - Training registration
  - Special training request
- Leave management
  - Leave request
  - Leave cancellation before and after approval
  - View Leave balance
  - View of all attendance events like in-time, out-time, late, permission, on-duty for a date from the calendar
- Payroll management
  - Payslip viewing and printing
  - Salary status
- Time sheet
  - Projects can be assigned with effective start date and end date
  - fill the draft time sheet in advance to save time with the possible project that they will be doing the following week
  - call the draft then enter the work hours here project would be populated from the draft without the need to re-enter
  - option to choose 'Work from home'
  - Can fill the time sheet
- Learning & Development
  - Analyze the concepts of a learning culture in an organization
  - View link shared by HR and department head
- Travel management
  - Travel request
- Grievance Management
  - can raise a grievance from the available list

- Visitor management
  - Email to employee about the visitor

#### 2.5 Recruiters Specific Requirements

- Login
- Dashboard
  - Profile
  - Vacancies
  - Notifications
- Candidate management
  - Applied candidate(CV, documents, details)
  - Shortlisted candidate(CV, documents, details, interview details)
  - Selected candidate(CV, documents, details, salary package)
  - Rejected candidate(CV, mail of rejection)
  - Blocked candidate(view reason of block)
  - Enquiry

## 2.6 Department Head Specific Requirements

- Dashboard
  - Employee list in that department
  - Number of employees present and absent
  - New joins
  - Company policies
  - Department head attendance
  - Leave used, remaining leave
  - Upcoming holidays
  - Work anniversary
  - Employee on leave
  - Upcoming birthdays
  - Announcements

- Department head profile
- Check in and check out
- Shift details of employees with edit option
- Attendance management
  - Shift management
  - Late management
  - Over time management
  - Permissions
  - Hourly on duty
  - Full day on duty
  - Manual attendance
  - Night shift
  - Holidays
  - Week off
- Time sheet
  - Projects can be assigned to team members with effective start date and end date
  - Tasks can be assigned to project and to team members
  - Email alerts to head for approval in HTML format whereby head can approve/reject on the mail itself.
- Recruitment management
  - Vacancy status to HR
- Performance management
  - KRA rating
  - Employee Appraisal
  - Report on Increments and promotions
- Training And Development
  - Training approval by department head
  - Training attendance
  - Training feedback

- Training Calendar
- Training history
- Learning and development
  - Courses are mapped across department and designation
  - Upload video links
  - Performance evaluation
  - Dynamic set of question patterns can be set against each course
- Task Management
  - Assign task to employees
  - Email alert to employee for entering assigned task
  - Email alert to know about assigned task status from employee
  - Various MIS reports pertaining to task
- Travel Management System
  - Travel approval
  - Expense approval
- Grievance Management
  - Email from employees
  - Response to employees

#### **2.7 Accountant Specific Requirements**

- Dashboard
  - Profile
  - Calendar
  - Employee details
- Payroll management
  - Payment date
  - Total employees
  - Net pay
  - Total deduction
- Loan management

	Dun ang lang magyagt
•	Process loan request
=	Dagnanga laan raguagt
•	Response loan request

# 3. NON-FUNCTIONAL REQUIREMENT

### **Flexibility**

A HRMS system must be nimble enough to allow easy changes. Without a high level of flexibility, the HRMS will become obsolete, and a new one will need to be purchased or created, which is usually not in the plans.

### Reliability

Error handling mechanism must be robust to avoid failure of operation and in case of failure the app reports it to the user without any due harm.

### **Speed**

The utilization of multiple technologies results in faster and more accurate results. In order to be effective as far as speed is concerned, the system should work seamlessly with proper hardware and backup systems.

#### **Accuracy**

All the data should keep working properly, keep getting perfect input, process accurately and produce the perfect output.

#### **Usability**

The UI of the Crest HRMS should be user friendly so that users can navigate easily through it.

#### Performance

Once the application starts, the user application should complete all tasks without errors.

#### **Security**

Any users who make use of the system need to hold a Login ID and password. The
administrator can view as well as alter any information in the HRMS